



# **York County Stormwater Advisory Committee**



Report to the Board of Supervisors  
and Citizens of York County  
2002-2004

# Committee Statement

## The York County Stormwater Advisory Committee

Mike Bossie, Chairman, District 3  
Lou Lafrenaye, Vice Chairman, District 2  
Ed Moninger, District 1  
Tom Burgess, District 1  
Chris Garrett, District 2  
Bill Beechel, District 2  
Richard Carver, District 3  
Helmut Walter, District 3  
Bob Brodel, District 5  
Ken Taylor, District 5

The York County Stormwater Advisory Committee (SAC) was established by the Board of Supervisors (BOS) on February 19, 2002, and formally organized in June 2002 with representatives from each district in York County. Our charter is to monitor the drainage improvement plan as adopted by the Board of Supervisors, to develop goals, objectives and implementation strategies to enhance the County's stormwater program, to advise the Board of Supervisors of the County's drainage problems, and to meet the public education, public outreach, and public involvement and participation component of the Phase II rules of VPDES MS 4 (Municipal Separate Storm Sewer System).

In this report, you will find a list of our accomplishments since June 2002 and, more importantly, a list of recommendations for consideration by the York County Board of Supervisors. It is our opinion that these recommendations would improve the County's ability to address drainage problems that currently affect our community, educate the public in drainage issues and prevent future problems as our community continues to grow. These recommendations address concerns raised by the citizens of York County, Committee members, and County staff. The Committee is prepared to discuss and clarify these recommendations with the Board of Supervisors and any concerned citizen. As always, we invite the citizens of York County to provide any additional recommendations to the Committee for future consideration.

The SAC would like to thank the staff of the York County Department of Environmental and Development Services (EDS), the York County Public Information Office, the local VDOT office and the many other York County departments that have cheerfully provided information, resources, and support during our tenure. The committee would especially like to thank Mrs. Marie Wallen for her tireless work in providing us with administrative and logistical support.

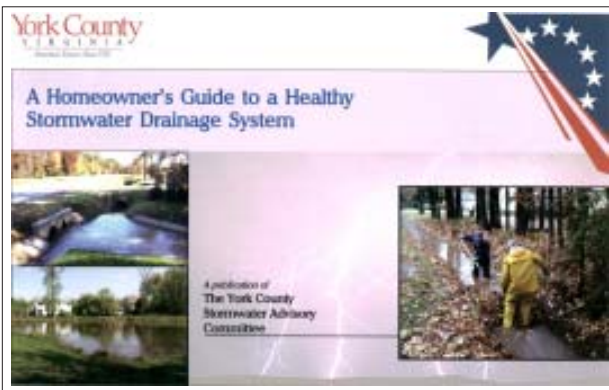




# Stormwater Advisory Committee Accomplishments

Over the past two years, the Stormwater Advisory Committee has been actively involved in identifying and addressing citizens' issues, providing coordination between our citizens and the responsible County staff, and conducting an education and outreach program to increase public involvement, awareness and participation. Below are the initiatives that we, as a Committee, have completed to date.

- Developed a Stormwater Advisory Committee website that provides specific information and recommendations on drainage issues, answers frequently asked questions from the citizens, provides County points of contact and lists other website links relevant to stormwater issues.
- Developed and published a "Drainage Complaint Worksheet" for citizens to report problems to County officials (accessible on our website).



- Developed and distributed an educational brochure entitled "A Homeowner's Guide to a Healthy Stormwater Drainage System" to increase citizen awareness of stormwater issues. This brochure was distributed to the citizens of York County through the Public Information Office (PIO), County libraries, homeowner associations, EDS office sites, HR Storm, Virginia Cooperative Extension Office, and Fire and Life Safety. This document is also available on our website, the EDS website and the HR Storm website.
- Developed a formal briefing entitled "How Citizens Can Reduce the Risk of Flooding in York County." This presentation was provided to homeowner associations (HOAs), the County's quarterly HOA meeting and was

documented in a County Courier television interview shown on Channel 46.

- Assisted EDS in developing a comprehensive master listing of all known drainage problems in York County and incorporated them into the Hansen System.
- Assisted some HOAs in developing proactive drainage system checks prior to significant rain events.
- Provided articles to the *Daily Press* and the *Citizen News* on stormwater issues.
- Published specific information to the public via the *Citizen News* on the effects of Hurricane Isabel and what citizens could do to help prevent future flooding.
- Provided input to the CY 2004 Yorktown Calendar addressing stormwater issues.
- Developed a master listing of all known HOAs to establish points of contact and inform them about the SAC.
- Formed subcommittees in some districts to involve HOAs in identifying drainage issues and solutions.
- Held meetings with VDOT and County staff to resolve drainage problems.

- Initiated the coordination between EDS and the Departments of the Air Force, Army and the National Park Service to resolve stormwater drainage issues where government property meets with York County boundaries.
- Developed and published two fact sheets about flood control and reducing pollution as part of our public education and outreach program.
- Committee members conducted numerous interactions with citizens within their districts, providing advice and assistance on stormwater issues. A total of 218 volunteer hours were logged in CY 2002 and 660 hours in CY 2003.



## Recommendations to the Board of Supervisors

The following are recommendations that would improve the County's control over repairing and preventing stormwater drainage problems. Some of these recommendations will require changes to our County's regulations. Others may require changes at the state level, which could impact the Code of Virginia and other state level regulatory

requirements. It is the Committee's observation with the information provided to us that available funding from both County and state sources at best cannot meet the growing day-to-day maintenance requirements, let alone needed new infrastructure improvements. One of the primary goals of our recommendations is to ensure all new/future construction is completed within inspection guidelines that will minimize future "corrective action" maintenance costs that fall either on York County taxpayers or individual homeowner associations. Ultimately, our intent is to provide information that would benefit the citizens of our County.

1. **Recommendation: A Certificate to construct stormwater facilities should be required.**  
Discussion: Inspections of stormwater pipes should follow the same procedures used for sanitary sewer lines to include a TV inspection prior to acceptance. This would ensure that proper pipe sizes are used, joints are sealed and the pipe invert elevations are correct.
2. **Recommendation: Require single-lot "as built" plan and inspection (survey) to ensure final lot elevation and grade by the homebuilder is done per the approved development plans.**  
Discussion: During construction, individual homebuilders sometimes modify the overall drainage plan designed by the developer's engineer and approved by the County. The builder would be required to submit a certified elevation survey of the site from a licensed surveyor verifying that the lot was graded in accordance with the approved development plan prior to a certificate of occupancy being issued by the County. If the house is constructed with a crawl space, the survey provided would confirm that the level of the sand backfill in the crawl space of the house is above the level of the final grade of the surrounding lot to prevent standing water from accumulating in the crawl space.
3. **Recommendation: Require project "as-built" plans earlier in the development construction process to detect issues more quickly.**



Discussion: The current ordinance allows building permits to be issued if the site improvements, including the sanitary sewer facilities, can be reasonably completed within 90 days. Recommend that the sanitary sewer facilities and the stormwater facilities be completed, including the submission of “as-builts” for both utilities, prior to building permits being issued. This would help ensure accuracy of development construction before individual home construction is started and would help ensure that the developer and builder meet the overall drainage design.

4. **Recommendation: Require the developer to provide no less than a 3-year warranty for stormwater design and function after the completion of the development.**

Discussion: A warranty is required by VDOT and the County for both streets and sanitary sewer system, respectively. We recommend that a warranty be provided by the developer to ensure the stormwater drainage system operates properly. This warranty would apply to the fully designed development, not just to sections or phases of the development. The warranty period should not start until after the County accepts the completed drainage system.

5. **Recommendation: Acquire additional staff/resources for plan reviews, inspections and maintenance of drainage ways. (Development and Compliance, Utilities, Mosquito Control and Drainage Maintenance Crew)**

Discussion: Maintenance requirements of existing drainage systems, along with those associated with new subdivisions, require additional staff to meet increased preventative maintenance, on-site inspections and to ensure construction codes are met. Therefore, additional staffing is recommended within the Divisions of Drainage & Mosquito Control and Utilities. Many of our drainage systems consist of nothing more than dirt ditches that require constant inspection and maintenance to prevent flooding conditions. It is the opinion of this Committee that we receive a significant benefit and a reduction in flooding potential by having enough personnel to regularly check and maintain the several hundred of miles of County drainage easements.



6. **Recommendation: We recommend that the Board of Supervisors contact local VDOT officials to ensure that manpower is allocated accordingly so drainage problems can be addressed and remedied. In addition, this request should be included in County legislative language and processes to effect an increase in local application of VDOT resources.**

Discussion: There are numerous examples of homeowners who have modified and/or blocked drainage systems on VDOT controlled easements and rights of way. These modifications will continue to cause drainage system issues if not corrected. In addition, sediment buildup and other naturally occurring events have led to significant reduction in drainage capacity along roads in older housing communities. VDOT needs to ensure that manpower is appropriately allocated to inspect and maintain these systems.

7. **Recommendation: Require developers to provide detailed information to newly established homeowner associations to clarify their true responsibilities and the cost associated with maintaining their stormwater lakes and ponds (BMPs). In addition, the County should provide assistance and information to current homeowner associations to meet their requirement of maintaining stormwater lakes and ponds.**

Discussion: At the time of transfer of ownership from the developer to a homeowner association, legal procedures assign the responsibility of maintaining constructed retention lakes and ponds to the

homeowners of that association. The Committee has found this process is not in the best interest of County citizens. The developer draws up the documents creating the HOA and related bylaws. The County and the newly established HOA board sign these legal documents. The only party in this agreement who does not have any construction or environmental engineering expertise is the newly organized homeowners who accept the legal responsibilities of their stormwater systems. These homeowners are normally not aware of the extent of their liability or the cost involved in maintaining these systems. These documents usually identify general responsibilities but often do not provide specific cost information necessary for HOA members to make appropriate management decisions in setting HOA membership fees. BMP failure rates and potential costs of dredging are not provided in these agreements. Dredging a BMP would be the single largest cost associated with the maintenance of HOA common property and should be identified in these documents and calculated into the initial HOA dues. Additionally, HOA members are normally not aware of the extent of current and potential construction that will empty into their stormwater systems. New construction adds pollutants and sedimentation to downstream systems. Current owners of stormwater retention systems have no recourse when new industrial areas or housing developments are constructed and the stormwater drainage is funneled into their existing retention ponds. This increases their operating and maintenance costs. In addition, these industrial areas or developments are not required to provide any funds to assist in the maintenance of these centralized BMPs. In short, HOAs with stormwater ponds are solely responsible for the maintenance



cost of meeting state and federal mandates regulating pollution and sediment runoff into the Chesapeake Bay for water runoff outside of their property boundaries. There are several specific actions that this Committee suggests that will help accomplish the above recommendation:

a) Require the developer to provide more detailed information to the HOAs at the time of property transfer, which identifies expected long-term maintenance costs such as potential dredging. This information should be required as part of the engineering plans provided to the County at the time of request for a permit to develop an area and should be certified by the engineering firm designing the plans.



- b) Require detailed information be provided by the developer to the HOAs, at the time of transfer, which identifies drainage areas and systems that empty into their BMPs along with possible future development sites that could affect their systems.
- c) Provide County staff support to HOAs to help manage current BMPs. Obtain and provide information on the environmental management, failure rates and associated dredging cost to assist HOAs in preparing plans for the expected failures of their systems. Develop and conduct a system of checks of the environmental health of Countywide BMPs and the rate of sedimentation.
- d) The Committee recognizes that additional funds will be required to manage the growing number of stormwater drainage systems in the County. The BOS must consider options to increase resources specifically for stormwater management including, but not limited to, reallocation of funds/assets within the County, usage fees or stormwater fees. The cost associated with the maintenance of our stormwater systems should be equitably distributed throughout the community.
- e) Ensure all maintenance agreements between the developer and County are disclosed to potential homeowners and provided to the newly developed HOA prior to acceptance of responsibility.

8. **Recommendation:** York County, in coordination with other local city, county and state representatives, initiate a study to determine the impact of private ownership of stormwater retention lakes and ponds.

**Discussion:** In the Committee's opinion, the County should go beyond these initial recommendations in addressing existing and unfolding issues associated with housing development stormwater retention ponds. County and state officials are responsible for complying with federally mandated environmental programs such as the Chesapeake Bay Program and Clean Water Act. It is unreasonable, and potentially problematic, to expect untrained homeowner associations, lacking engineering/

environmental expertise, to comply with often complex and demanding requirements of maintaining healthy and regulatory compliant retention ponds and associated portions of drainage systems. We also believe that this is not just a local problem but that it is systemic in growing localities across the state. As the number of homeowner association-maintained ponds continues to grow, they become an increasingly critical link in the overall water flow ecosystem. Without any exercised oversight responsibility and qualified maintenance expertise in place, long-term health and functionality of retention ponds and associated drainage system flows are in jeopardy. This issue requires further focused study, a clear articulation of the issues, and implementation of long-range plans for resolution. The long-term health of local as well as statewide drainage systems depends upon successfully resolving this issue. Failure to address the problem will likely result in costly repair/corrective measures and failure to meet federally mandated environmental standards and programs.





## **Stormwater Advisory Committee Members**

The SAC consists of two members from each election district and two at-large members. Citizens can contact their Committee district representative in two ways: Individuals without Internet capability can call the Department of Environmental and Development Services at 890-3750 to request information about our Committee members and meeting dates. Those citizens with Internet access can obtain a list of Committee members by district, meeting dates and other stormwater information through our website located at [www.yorkcounty.gov/stormwater/index.htm](http://www.yorkcounty.gov/stormwater/index.htm).

Committee meetings are open to the public. Committee members are selected and approved by the Board of Supervisors for a two-year term. Any concerned citizen who wishes to join this Committee should submit an application through the County website located at [www.yorkcounty.gov/forms/comment1.htm](http://www.yorkcounty.gov/forms/comment1.htm) or obtain an application form from the County Administration Office located at 224 Ballard Street, Yorktown, Virginia.